

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:
forming a plurality of slot portions in a top surface of a substrate; and,
etching a trench in a back surface of the substrate contiguous and in fluidic
communication with the plurality of slot portions to form a compound slot such that at least
one reinforcement structure extends across the compound slot to connect substrate material
on opposite sides of the compound slot, wherein the at least one reinforcement structure
connects with the top surface of the substrate.
2. (Original) The method of claim 1, wherein said act of etching forms a trench having
a v-shaped profile when viewed transverse a long axis of the compound slot.
3. (Previously Presented) The method of claim 1, wherein said act of etching forms a
trench which is defined, at least in part, by a first sidewall and a second sidewall and wherein
each of the first and second sidewalls are oriented at an angle of between 10 degrees and 80
degrees relative to a first surface of the substrate.
4. (Original) The method of claim 1, wherein said act of forming a plurality of slot
portions comprises forming a plurality of slots which extend between a first substrate surface
and a second generally opposite second substrate surface.
5. (Original) The method of claim 1, wherein said act of forming a plurality of slot
portions comprises forming a plurality of vias.
6. (Original) The method of claim 1, wherein said act of forming a plurality of slot
portions comprises laser machining the plurality of slot portions.
7. (Original) The method of claim 1, wherein said act of forming a plurality of slot
portions comprises etching the plurality of slot portions.
8. (Original) The method of claim 7, wherein said act of etching comprises masking

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areas on a backside surface of the substrate.

9. (Original) The method of claim 7, wherein said act of etching comprises anisotropically etching.

10. (Original) The method of claim 7, wherein said act of etching comprises alternating acts of etching and passivating.

11. (Original) The method of claim 1, wherein said act of etching a trench comprises exposing the substrate to an etchant sufficient to remove substrate material to form the trench while retaining at least some substrate material between individual slot portions.

12. (Original) The method of claim 1, wherein said act of etching a trench comprises wet etching.

13. (Withdrawn) A print cartridge incorporating a substrate formed in accordance with the method of claim 1.

14. (Currently Amended) A method comprising:
forming a plurality of slot portions into a first surface of a substrate wherein the substrate has a thickness defined between the first surface and a generally opposing second surface; and,
exposing both the first and second surfaces of the substrate to an etchant sufficient to remove substrate material to form a compound slot having a fluidic relationship with the first and second surfaces while retaining substrate material comprising at least one reinforcement structure extending across the compound slot to connect substrate material on opposite sides of the compound slot, the substrate being stronger in bending in or out of a plane of at least a portion of a first surface of the substrate than if said at least one reinforcement structure were not present and the at least one reinforcement structure connecting with the top surface of the substrate.

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15. (Original) The method of claim 14, wherein said act of exposing forms a terminus on individual reinforcement structures and wherein the terminus is defined, at least in part, by two angled walls which lie at an angle between 10 degrees and 80 degrees relative to the second surface.

16. (Original) The method of claim 14, wherein said act of forming a plurality of slot portions comprises forming a plurality of slots.

17. (Original) The method of claim 14, wherein said act of forming a plurality of slot portions comprises forming a plurality of vias.

18. (Original) The method of claim 14, wherein said act of exposing comprises exposing the substrate to isotropic etching conditions.

19. (Original) The method of claim 14 further comprising prior to said act of exposing, positioning a material over at least portions of at least one of the first and second surfaces to control the removal of substrate material as a result of said act of exposing.

20. (Canceled)

21. (Currently Amended) A method comprising:
forming a plurality of slot portions into a first surface of a substrate wherein the substrate has thickness defined between the first surface and a generally opposing second surface, adjacent slot portions being separated by substrate material; and,
forming a trench portion into the second surface in contiguous and fluid flowing relation with the slot portions, the trench portion in combination with the slot portions defining a compound slot, wherein said forming a trench portion removes substrate material to define a reinforcement structure extending across the compound slot to connect substrate material on opposite sides of the compound slot and having a terminus proximate the second surface comprising at least two angled walls, wherein the reinforcement structure connects with the first surface of the substrate.

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22. (Original) The method of claim 21, wherein said act of forming a trench portion causes the terminus to have four angled walls and wherein the four angled walls tend to reduce bubble accumulation in the trench portion.

23. (Original) The method of claim 21, wherein said act of forming a trench portion comprises patterning the first and second surfaces and exposing the substrate to an etchant.

24. (Original) The method of claim 23, wherein said act of forming a plurality of slot portions forms slot portions having given dimensions at the first surface and wherein said act of forming a trench portion does not increase the given dimensions at the first surface.

25. (Original) The method of claim 21, wherein said act of forming a plurality of slot portions forms slot portions extending through less than a majority of the thickness.

26. (Canceled)

27. (Currently Amended) A print cartridge substrate forming method, comprising forming a plurality of slot portions into a first surface of a substrate the substrate has a thickness defined the first surface and a generally opposing second surface; and, exposing both the first and second surfaces of the substrate to an etchant sufficient to remove substrate material to form a compound slot having a fluidic relationship with the first and second surfaces while retaining substrate material comprising at least one reinforcement structure extending across the compound slot to connect substrate material on opposite sides of the compound slot, the substrate being stronger in bending in or out of a plane of at least a portion of a first surface of the substrate than if said at least one reinforcement structure were not present and the at least one reinforcement structure connecting with the top surface of the substrate.

28. (Withdrawn) A print cartridge incorporating a substrate formed in accordance with the method of claim 27.

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29. (Currently Amended) A fluid-ejecting device forming method comprising:
forming a plurality of fluid-handling structures over a first surface of a semiconductor substrate, the plurality of slot portions having at least one reinforcement structure extending across a slot to connect substrate material on opposite sides of the slot, wherein the at least one reinforcement structure connects with the first surface of the substrate;
removing material from the substrate sufficient to form a plurality of slot portions in the substrate; and,
etching through at least some of the fluid-handling structures to form a generally elongate trench in the substrate which is in fluid-flowing relation with the plurality of slot portions and is connected to a second surface of the semiconductor substrate.